

WHAT IS CLAIMED IS:

1. An image processing apparatus for processing
an image in accordance with property information for
defining an image processing method for processing
5 image data of the image, comprising:
inputting means for inputting the image data, key
information used for recognizing alteration of the
image data, and the property information;
judging means for judging from the image data and
10 the key information input by said inputting means
whether the image data was altered; and
controlling means for controlling an execution of
the image processing method in accordance with a
judgement by said judging means and the property
15 information.
2. An image processing apparatus according to
claim 1, further comprising an interface for accessing
a detachable memory wherein the image data, the key
20 information and the property information are stored in
the detachable memory.
3. An image processing apparatus according to
claim 1, wherein the property information defines the
25 image processing method used for executing printing
output.

4. An image processing apparatus according to
claim 1, wherein the property information defines
contents of the control to be executed by said
controlling means in accordance with the judgement by
5 said judging means.

5. An image processing apparatus according to
claim 1, wherein the image data input by said inputting
means includes a digital signature, the key information
10 is key information used for the digital signature, and
said image processing apparatus further comprises
digital signature decrypting means for decrypting the
digital signature by using the key information.

6. An image processing apparatus according to
claim 5, wherein said judging means executes a
judgement process by comparing information obtained by
calculating the image data in a predetermined manner
with information obtained by said digital signature
20 decrypting means.

7. An image processing method for processing an
image in accordance with property information for
defining an image data processing method, comprising
25 the steps of:

inputting image data, key information used for
recognizing alteration of the image data, and the

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property information;

judging from the image data and the key
information input at said inputting step whether the
image data was altered; and

5 controlling an execution of the image processing
method in accordance with a judgement at said judging
step and the property information.

8. A storage medium storing processor-
10 implementable instructions for controlling a processor
to carry out the method on Claim 7.

9. An image processing system with an interface
capable of accessing a memory medium, comprising:

15 information reading means for reading a digital
signature of image file data stored in the memory
medium, a secret key used for the digital signature, or
a public key paired to the secret key, together with
the image file data and property information for
20 defining an image processing method for processing
image data; and

image output controlling means for outputting an
image in accordance with information read by said
information reading means.

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10. An image processing system according to claim
9, further comprising digital signature decrypting

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means for decrypting the digital signature of the image file data read by said information reading means by using the public key.

5 11. An image processing system according to claim 9, further comprising calculating means for calculating an image file specific value obtained from the image file data by using one-way function.

10 12. An image processing system according to claim 9, further comprising image file data examining means for examining the image file data in accordance with a data value obtained by said digital signature decrypting means and the value obtained by the
15 calculating means.

 13. An image processing system with an interface capable of accessing a memory medium, comprising:

 memory medium detecting means for detecting a
20 connection of the memory medium to the interface;
 information reading means, responsive to a detection of the connection of the memory medium by said memory medium detecting means, for reading a digital signature of image file data stored in the
25 memory medium, a secret key used for the digital signature, or a public key paired to the secret key, together with the image file data and property

information for defining an image processing method for processing image data; and

image output controlling means for outputting an image in accordance with information read by said
5 information reading means.

14. An image processing system with an interface capable of accessing a memory medium, comprising:

image file data generating means for generating
10 image file data to be stored in the memory medium;

image file data storing means for storing the image file data generated by said image file data generating means in the memory medium;

calculating means for calculating an image file
15 specific value obtained from the image file data by using a one-way function; and

digital signature generating means for generating a digital signature by dencrypting the value calculated by said calculating means by using a secret key stored
20 in the memory medium.

15. An image processing system according to claim 14, further comprising:

first storing means for storing the digital
25 signature generated by said digital signature generating means together with property information for defining an image data processing method for processing

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image data in a property area of the memory medium; and
second storing means for storing the image file
data to be signed in the memory medium.

5 16. An image processing system according to claim
14, wherein the secret key for decrypting the value
calculated by said calculating means is an apparatus
specific secret key.

10 17. An image processing system according to claim
14, further comprising secret key generating means for
newly generating a secret key for decrypting the value
calculated by said calculating means, in accordance
with a user definition.

15 18. An image processing method for an image
processing system with an interface capable of
accessing a memory medium, the method comprising the
steps of:

20 reading a digital signature of image file data
stored in the memory medium, a secret key used for the
digital signature, or a public key paired to the secret
key, together with the image file data and property
information for defining an image processing method for
25 processing image data; and

 outputting an image in accordance with information
read at said information reading step.

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19. An image processing method according to claim
18, further comprising a step of decrypting the digital
signature of the image file data read at said
information reading step by using the public key stored
5 in the memory medium.

20. An image processing method according to claim
18, further comprising a step of calculating an image
file specific value obtained from the image file data
10 by using one-way function.

21. An image processing method according to claim
20, further comprising the steps of:

decrypting the digital signature of the image file
15 data;

comparing a value obtained at said digital
signature decrypting step with the value obtained at
the calculating step; and

examining the image file data in accordance with a
20 comparison result at said comparing step.

22. An image processing method for an image
processing system with an interface capable of
accessing a memory medium, comprising:

25 a memory medium detecting step of detecting a
connection of the memory medium to the interface;

a reading step, responsive to a detection of the

connection of the memory medium at said memory medium
detecting step, of reading a digital signature of image
file data stored in the memory medium, a secret key
used for the digital signature, or a public key paired
5 to the secret key, together with the image file data
and property information for defining an image
processing method for processing image data; and
outputting an image in accordance with information
read at said reading step.

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23. An image processing method for an image
processing system with an interface capable of
accessing a memory medium, comprising the steps of:

generating image file data to be stored in the
15 memory medium;

storing the image file data generated at said
image file data generating step in the memory medium;

calculating an image file specific value obtained
from the image file data by using a one-way function;
20 and

generating a digital signature by dycrypting the
value calculated at said calculating step by using a
secret key stored in the memory medium.

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24. An image processing method for an image
processing system according to claim 23, further
comprising the steps of:

storing the digital signature generated at said digital signature generating step together with a property file in a property area of the memory medium; and

5 storing the image file data to be signed in an image file area of the memory medium.

25. An image processing method according to claim 20, wherein the secret key for decrypting the value
10 calculated at said calculating step is an apparatus specific secret key.

26. An image processing method according to claim 20, further comprising a step of newly generating a
15 secret key for decrypting the value calculated at said calculating step, in accordance with a user definition.

27. A memory card storing:
image data file;
20 digital signature information of said image data file;
secret key information used for the digital signature;
public key information paired to said secret key;
25 and
property information defining an image processing method for processing image data.

28. A storage medium storing processor-
implementable instructions for controlling a processor
to carry out the method on Claim 18.

5 29. A storage medium storing processor-
implementable instructions for controlling a processor
to carry out the method on Claim 22.

10 30. A storage medium storing processor-
implementable instructions for controlling a processor
to carry out the method on Claim 23.

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